

DETAIL 02713-12(B)  
COBB COUNTY WATER SYSTEM  
THRUST BLOCK DIMENSIONS

AUGUST 7, 2001

AGENCY DIRECTOR

FITTING	PIPE DIA. (IN.)	THRUST	BLOCK	DIM.	(FEET)	APPROX. VOL. (C.Y.)	BEARING AREA (SQ. FT.)	DESIGN THRUST (Lbs.)
		A	B	C	D			
90° BEND	6	1.0	1.6	3.9	2.4	0.30	9.3	18,500
	8	1.2	2.1	5.2	3.1	0.66	15.9	31,825
	10	1.5	2.5	6.3	3.8	1.23	23.9	47,875
	12	1.7	3.0	7.5	4.5	2.05	33.8	67,705
	14	2.0	3.5	8.7	5.2	3.20	45.5	90,960
	16	2.2	4.0	9.9	5.9	4.69	58.8	117,645
	18	2.5	4.5	11.1	6.6	6.61	73.9	147,755
	20	2.7	5.0	12.3	7.4	8.95	90.6	181,290
	24	3.3	5.9	14.7	8.8	15.31	129.3	258,650
45° BEND	6	0.5	1.2	2.9	1.7	0.11	5.0	10,015
	8	0.6	1.5	3.8	2.3	0.25	8.6	17,230
	10	0.8	1.9	4.6	2.8	0.47	13.0	25,920
	12	0.9	2.2	5.5	3.3	0.79	18.3	36,655
	14	0.9	2.6	6.4	3.8	1.21	24.6	49,250
	16	1.0	2.9	7.3	4.4	1.78	31.8	63,695
	18	1.1	3.3	8.2	4.9	2.50	40.0	80,000
	20	1.2	3.6	9.0	5.4	3.40	49.1	98,155
	24	1.5	4.3	10.8	6.5	5.81	70.0	140,040
22 1/2° BEND	6	0.5	0.8	2.1	1.2	0.04	2.6	5,120
	8	0.6	1.1	2.7	1.6	0.10	4.4	8,810
	10	0.8	1.3	3.3	2.0	0.18	6.6	13,250
	12	0.9	1.6	4.0	2.4	0.30	9.4	18,740
	14	0.9	1.8	4.6	2.8	0.46	12.6	25,175
	16	1.0	2.1	5.2	3.1	0.67	16.3	32,560
	18	1.1	2.3	5.8	3.5	0.94	20.4	40,895
	20	1.2	2.6	6.5	3.9	1.28	25.1	50,175
	24	1.5	3.1	7.7	4.6	2.19	35.8	71,585
11 1/4° BEND	6	0.5	0.6	1.5	0.9	0.02	1.3	2,580
	8	0.6	0.8	1.9	1.2	0.04	2.2	4,440
	10	0.8	0.9	2.4	1.4	0.07	3.3	6,675
	12	0.9	1.1	2.8	1.7	0.12	4.7	9,440
	14	0.9	1.3	3.2	2.0	0.17	6.3	12,680
	16	1.0	1.5	3.7	2.2	0.25	8.2	16,400
	18	1.1	1.7	4.2	2.5	0.35	10.3	20,595
	20	1.2	1.8	4.6	3.3	0.48	12.6	25,270
	24	1.5	2.2	5.5	5.8	0.83	18.0	36,055
TEE /PLUG	6	1.0	1.3	3.3	2.0	0.19	6.5	13,080
	8	1.2	1.7	4.3	2.6	0.41	11.2	22,500
	10	1.5	2.1	5.3	3.2	0.76	16.9	33,850
	12	1.7	2.5	6.3	3.8	1.26	23.9	47,870
	14	2.0	2.9	7.3	4.4	1.97	32.2	64,315
	16	2.2	3.3	8.3	5.0	2.88	41.6	83,185
	18	2.5	3.8	9.3	5.6	4.06	52.2	104,475
	20	2.7	4.2	10.4	6.2	5.49	64.1	128,190
	24	3.3	5.0	12.4	7.4	9.40	91.4	182,885

Thrust Block Notes:

- The dimensions and values in these tables are based on the following:
  - Water main test pressure = 350 p.s.i.
  - Horizontal bearing strength of soil = 2,000 p.s.f.
- The bearing surface of the thrust block shall be placed against undisturbed soil. If this is not possible, the fill between the bearing surface and undisturbed soil shall be compacted to at least 95% Modified Proctor density.